

## Coach Evaluation Scenarios

STUDENT: \_\_\_\_\_

### Scenario 1:

- Robot Capabilities
  - Red1 – Stack max of 4, slow (Coach will use)
  - Red2 – Stack max of 2, fast (Coach will use)
  - Blue1 – no stack, but fast robot, capable of going under bar, arm swipe
  - Blue2 – stack max of 4, medium speed
- Plan of Attack by coach
  - Human Player – decide bin location and why (45 seconds)
  - Autonomous Stage – tell us what each will do and why (in 60 seconds)
- Human Player stage (10 seconds)
  - Coach – set up the red bins
  - Blue – Stack 4 stacks of 2 in each back corner (2 next to each other)
- Autonomous Stage:
  - Red1 and Red2 – As described by coach
  - Blue1 – Back up under bar and ram Red1 to back wall
  - Blue2 – Out to edge of ramp, 180, to top of ramp and knock bins over (12 seconds)
- Human Interaction stage
  - Blue1 will protect Blue2 as Blue2 creates 2 stacks (4-tall).
  - T-30 seconds: Blue2 goes to ramp and sits
  - T-5 seconds: Blue1 goes to ramp and sits (moderate capability to push other robots off of ramp)
- Notes / Discussion about how game went:

## Coach Evaluation Scenarios

### Scenario 2:

- Robot Capabilities
  - Red1 – Stack max of 4, slow (Coach will use)
  - Red2 – Our Robot (Coach will use)
  - Blue1 – no stack, but fast robot, capable of going under bar, arm swipe
  - Blue2 – stack max of 4, medium speed
- Plan of Attack by coach
  - Human Player – decide bin location and why (45 seconds)
  - Autonomous Stage – tell us what each will do and why (in 60 seconds)
- Human Player stage (10 seconds)
  - Coach – set up the red bins
  - Blue – Stack 6 bins in front of ramp and 2 in back corner
- Autonomous Stage:
  - Red1 and Red2 – As described by coach
  - Blue1 – Go forward, rotate 90 degrees, and knock over all stacks in back half of scoring zone, full width (full 15 seconds)
  - Blue2 – Out to edge of ramp, 180, to top of ramp and knock bins over (12 seconds)
- Human Interaction stage
  - Blue1 will protect Blue2 as Blue2 creates 2 stacks (4-tall), after Blue1 goes over ramp.
  - T-60 seconds: Blue1 goes under ramp and knocks over stacks
  - T-30 seconds: Blue2 goes to KOH
  - T-5 seconds: Blue1 goes to KOH (moderate capability to push other robots off of ramp)

## **Coach Evaluation Scenarios**

### **Scenario 3:**

- Robot Capabilities
  - Red1 – Stack max of 2, fast (Coach will use)
  - Red2 – Our Robot (Coach will use)
  - Blue1 – Stack max of 3, fast, arm swiper
  - Blue2 – stack max of 4, medium speed
- Plan of Attack by coach
  - Human Player – decide bin location and why (45 seconds)
  - Autonomous Stage – tell us what each will do and why (in 60 seconds)
- Human Player stage (10 seconds)
  - Coach – set up the red bins
  - Blue – 2 stacks, 3-high, protected by two 1-stack bins, all in back corner
- Autonomous Stage:
  - Red1 and Red2 – As described by coach
  - Blue1 – line follower to top of ramp, knock stacks along the way, able to knock over 4 stacks at end of 15 seconds (full 15 seconds)
  - Blue2 – Find stacks, based on tape, to knock over any stacks, closest proximity first (full 15 seconds)
- Human Interaction stage
  - Blue 1 will create many 3 tall stacks.
  - Blue 2 will attack the Red stacks
  - T-45 seconds: Blue1 joins Blue 2 to knock over Red stacks
  - T-15 seconds: Blue1 and Blue2 goes to KOH